6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R08-OAR-2016-0585; FRL-9971-07-Region 8]

Approval and Promulgation of Air Quality Implementation Plans; State of Utah; Logan Nonattainment Area Fine Particulate Matter State Implementation Plan for Attainment of 2006 24-Hour Fine Particulate Matter National Ambient Air Quality Standards

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve the emissions inventory, modeled attainment demonstration, determination for Major Stationary Source Reasonably Available Control Technology (RACT), determination for On-Road Mobile Sources Reasonably Available Control Measures (RACM), determination for Cache County Inspection and Maintenance (I/M) Program as additional reasonable measures, determination for Off-Road Mobile Sources RACM, and the 2015 Motor Vehicle Emission Budgets (MVEB) portions of the attainment plan submitted by Utah on December 16, 2014, to address Clean Air Act (CAA or the Act) requirements for the 2006 24-hour fine particulate matter ($PM_{2.5}$) national ambient air quality standards (NAAQS) in the Logan, UT-ID Moderate $PM_{2.5}$ nonattainment area. These actions are being taken under section 110 of the CAA.

DATES: Written comments must be received on or before **[Insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R08-OAR-2016-0585 at https://www.regulations.gov. Follow the online instructions for submitting comments.

Once submitted, comments cannot be edited or removed from www.regulations.gov. The EPA may publish any comment received to the public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information, the disclosure of which is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit https://www.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Crystal Ostigaard, Air Program, U.S. Environmental Protection Agency (EPA), Region 8, Mailcode 8P-AR, 1595 Wynkoop Street, Denver, Colorado 80202-1129, (303) 312-6602, ostigaard.crystal@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

What should I consider as I prepare my comments for EPA?

a. Submitting CBI. Do not submit CBI to the EPA through www.regulations.gov or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to the EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes

information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

b. Tips for Preparing Your Comments. When submitting comments, remember to:

1. Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).
2. Follow directions - The agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
3. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
4. Describe any assumptions and provide any technical information and/or data that you used.
5. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
6. Provide specific examples to illustrate your concerns, and suggest alternatives.
7. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
8. Make sure to submit your comments by the comment period deadline identified.

II. Background

On October 17, 2006 (71 FR 61144), the EPA revised the level of the 24-hour $PM_{2.5}$ NAAQS, lowering the primary and secondary standards from the 1997 standard of 65

micrograms per cubic meter (µg/m^3) to 35 µg/m^3. On November 13, 2009 (74 FR 58688), the EPA designated three nonattainment areas in Utah for the 24-hour $PM_{2.5}$ NAAQS of 35 µg/m^3. These are the Salt Lake City, Utah (UT); Provo, UT; and Logan, UT-Idaho (ID) nonattainment areas.

The Logan, UT-ID $PM_{2.5}$ nonattainment area, also called the Cache Valley, is composed of portions of Cache County, UT and Franklin County, ID. The Cache Valley is an isolated, bowl-shaped valley measuring approximately 60 kilometers north to south and 20 kilometers east to west and almost entirely surrounded by mountain ranges. The Wellsville Mountains lie to the west, and on the east lie the Bear River Mountains; both are northern branches of the Wasatch Range. The State considers topography as a barrier to air movement during the conditions which lead to elevated concentrations of fine particulates and as the primary factor in determining where the population is located. The low-lying valleys which trap air during winter-time temperature inversions are also the regions within which people live. Additional information pertaining to the unique issues associated with the Logan, UT-ID nonattainment area and studies completed on inversions can be found in the 9-factor analysis for Utah and Idaho in the November 13, 2009 (74 FR 58688) action titled "Air Quality Designations for the 2006 24-Hour Fine Particulate ($PM_{2.5}$) National Ambient Air Quality Standards."

The EPA originally issued a rule in 2007[1] regarding implementation of the $PM_{2.5}$ NAAQS for the nonattainment area requirements specified in CAA title I, part D, subpart 1. Under subpart 1, Utah was required to submit an attainment plan for each area no later than

[1] 72 FR 20586; April 25, 2007.

three years from the date of nonattainment designation. These plans needed to provide for the attainment of the $PM_{2.5}$ standards as expeditiously as practicable, but no later than five years from the date the areas were designated nonattainment.

Following the November 13, 2009 designation of nonattainment for $PM_{2.5}$, Utah developed a draft $PM_{2.5}$ attainment plan intended to meet the requirements of subpart 1. The EPA submitted written comments dated November 1, 2012, to the Utah Division of Air Quality (UDAQ) on the draft $PM_{2.5}$ SIP, technical support document (TSD), area source rules, and point source rules found in Section IX, Part H.[2] Utah submitted a revised $PM_{2.5}$ attainment plan for the Logan, UT-ID nonattainment area on December 14, 2012.

On January 4, 2013, the U.S. Court of Appeals for the District of Columbia held that the EPA should have implemented the 2006 $PM_{2.5}$ 24-hour standards, as well as the other $PM_{2.5}$ NAAQS, based on both CAA title I, part D, subpart 1 and subpart 4. Under subpart 4, all nonattainment areas are initially classified as Moderate, and Moderate area attainment plans must address the requirements of subpart 4 as well as subpart 1. Additionally, subpart 4 sets a different SIP submittal due date and attainment year. For a Moderate area, the attainment SIP is due 18 months after designation and the attainment year is as expeditiously as practicable, but no later than the end of the sixth calendar year after designation.

On June 2, 2014 (79 FR 31566), the EPA finalized the Identification of Nonattainment Classification and Deadlines for Submission of State Implementation Plan (SIP) Provisions for the 1997 Fine Particulate ($PM_{2.5}$) National Ambient Air Quality Standard (NAAQS) and 2006

[2] An "area source" is "any small residential, governmental, institutional, commercial, or industrial fuel combustion operation; onsite solid waste disposal facility; motor vehicle], aircraft vessel or other transportation facilit[y] or other miscellaneous source identified" through specified inventory techniques. 40 CFR 51.100(l). A "point source" is any stationary source emitting above certain thresholds. 40 CFR 51.100(k).

$PM_{2.5}$ NAAQS ("the Classification and Deadlines Rule"). This rule classified as Moderate the areas that were designated in 2009 as nonattainment, and set the attainment SIP submittal due date for those areas at December 31, 2014. Additionally, this rule established the Moderate area attainment date of December 31, 2015.

After the court's 2013 decision, Utah amended its attainment plan to address the requirements of subpart 4. On December 2, 2013, and October 30, 2014, the EPA provided comments on Utah's revised draft $PM_{2.5}$ SIPs, including the TSD and emissions limits in Section IX, Part H. Subsequently, on December 16, 2014, UDAQ withdrew all prior Logan, UT-ID $PM_{2.5}$ Moderate SIP submissions and submitted a subpart 1 and subpart 4 $PM_{2.5}$ Moderate SIP, which is one of the submissions we are proposing to act on today.[3]

On August 24, 2016, the EPA finalized the Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements ("$PM_{2.5}$ Implementation Rule"), 81 FR 58010, which partially addressed the January 4, 2013 court ruling. The final $PM_{2.5}$ Implementation Rule details how air agencies can meet the statutory SIP requirements under subparts 1 and 4 that apply to areas designated nonattainment for any $PM_{2.5}$ NAAQS, such as: general requirements for attainment plan due dates and attainment demonstrations; provisions for demonstrating reasonable further progress (RFP); quantitative milestones; contingency measures; Nonattainment New Source Review (NNSR) permitting programs; and RACM (including RACT). The statutory attainment planning requirements of subparts 1 and 4 were established to ensure that the following goals of the CAA are met: (i) that states

[3] The Salt Lake City, UT and Provo, UT Moderate $PM_{2.5}$ SIPs attainment plans, including requirements regarding RACM under CAA subparts 1 and 4 of part D, title I of the Act, will be acted on separately.

implement measures that provide for attainment of the $PM_{2.5}$ NAAQS as expeditiously as practicable; and, (ii) that states adopt emissions reduction strategies that will be the most effective at reducing $PM_{2.5}$ levels in nonattainment areas.

On September 8, 2017 (82 FR 42447), the EPA granted two, one-year extensions of the Moderate attainment date for the Logan, UT-ID Moderate $PM_{2.5}$ nonattainment area until December 31, 2017.

III. Clean Air Act Requirements for $PM_{2.5}$ Moderate Nonattainment Area Plans

A. $PM_{2.5}$ Moderate Area Plan Requirements

Upon designation as a Moderate nonattainment area under subpart 1 and subpart 4, the CAA requires the State to submit the following Moderate area SIP elements:

1. A comprehensive, accurate, current inventory of actual emissions from all sources of $PM_{2.5}$ and $PM_{2.5}$ precursors in the area (CAA section 172(c)(3));

2. Provisions to assure that RACM, including RACT, for the control of direct $PM_{2.5}$ and $PM_{2.5}$ precursors shall be implemented no later than four years after the area is designated (CAA sections 172(c)(1) and 189(a)(1)(C));

3. A demonstration (including air quality modeling) that the plan provides for attainment as expeditiously as practicable but no later than the Moderate area attainment date;

4. Plan provisions that require RFP (CAA section 172(c)(2));

5. Quantitative milestones which are to be achieved every three years until the area is redesignated attainment and which demonstrate RFP toward attainment by the applicable date (CAA section 189(c));

6. Provisions to assure that control requirements applicable to major stationary

sources of $PM_{2.5}$ also apply to major stationary sources of $PM_{2.5}$ precursors, except where the State demonstrates to the EPA's satisfaction that such sources do not contribute significantly to $PM_{2.5}$ levels that exceed the standard in the area (CAA section 189(e));

7. Contingency measures to be implemented if the area fails to meet RFP or fails to attain by the applicable attainment date (CAA section 172(c)(9)); and

8. A revision to the NNSR program to set the applicable "major stationary source" thresholds to 100 tons per year (tpy) (CAA section 302(j)).

Moderate area $PM_{2.5}$ plans must also satisfy the general requirements applicable to all SIP submissions under section 110 of the CAA, including the requirement to provide necessary assurances that the implementing agencies have adequate personnel, funding and authority under CAA section 110(a)(2)(E) and the requirements concerning enforcement provisions in CAA section 110(a)(2)(C).

The EPA interprets the CAA's requirements for particulate matter plans under part D, title I of the Act in the following documents: (1) "State Implementation Plans; General Preamble for the Implementation of Title I of the CAA Amendments of 1990," 57 FR 13498 (April 16, 1992) ("General Preamble"); (2) "State Implementation Plans; General Preamble for the Implementation of Title I of the CAA Amendments of 1990; Supplemental," 57 FR 18070 (April 28, 1992) ("Supplement"); (3) "State Implementation Plans for Serious PM_{10} Nonattainment Areas, and Attainment Date Waivers for PM_{10} Nonattainment Areas Generally; Addendum to the General Preamble for the Implementation of Title I of the CAA Amendments of 1990," 59 FR 41998 (August 16, 1994) ("Addendum"); and (4) "Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements," August

24, 2016 (81 FR 58010) ("$PM_{2.5}$ Implementation Rule"). We discuss these interpretations of the Act as appropriate in our evaluation of the Logan, UT-ID Moderate $PM_{2.5}$ Plan.

B. Implementation of Reasonably Available Control Measures

Section 172(c)(1) of the Act (from subpart 1) requires that attainment plans, in general, provide for the implementation of all RACM (including RACT) as expeditiously as practicable and shall provide for attainment of the national primary ambient air quality standards. CAA section 189(a)(1)(C) (from subpart 4) requires Moderate area attainment plans to contain provisions to assure that RACM is implemented no later than four years after designation.

The EPA stated its interpretation of the RACT and RACM requirements of subparts 1 and 4 in the 1992 General Preamble for the Implementation of Title I of the CAA Amendments of 1990, 57 FR 13498 (Apr. 6, 1992). For RACT, the EPA followed its "historic definition of RACT as the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility." 57 FR 13541. Like RACT, the EPA has historically considered RACM to consist of control measures that are reasonably available, considering technological and economic feasibility. *See* $PM_{2.5}$ Implementation Rule, 81 FR 58010.

IV. EPA's Evaluation of the Logan, UT-ID $PM_{2.5}$ Moderate Plan.

The EPA is proposing to act on the following portions of the Logan Moderate $PM_{2.5}$ SIP: the emissions inventory, modeled attainment demonstration, determination for Major Stationary Source RACT, determination for On-Road Mobile Sources RACM, determination for Cache County I/M Program as additional reasonable measures, determination for Off-Road Mobile Sources RACM, and 2015 MVEB.

A. Emissions Inventory

1. Requirements for Emissions Inventories

CAA section 172(c)(3) requires that each SIP include a "comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in [the] area…." By requiring an accounting of actual emissions from all sources of the relevant pollutants in the area, this section provides for the base year inventory to include all emissions that contribute to the formation of a particular NAAQS pollutant. For the 2006 $PM_{2.5}$ standards, this includes direct $PM_{2.5}$ as well as the precursor emissions to the formation of secondary $PM_{2.5}$: nitrogen oxide (NO_x), sulfur dioxide (SO_2), volatile organic compounds (VOC), and ammonia (NH_3). Direct $PM_{2.5}$ includes condensable and filterable particulate matter. Additionally, a state must include in its SIP submission documentation explaining how the emissions data were calculated. In estimating mobile source emissions, a state should use the latest emissions models and planning assumptions available at the time the SIP is developed.

In addition to the base year inventory submitted to meet the requirements of CAA section 172(c)(3), the State must also submit future inventories for the projected attainment year and any other year of significance for meeting applicable CAA requirements. By attainment projected inventories, we mean the projected emissions inventories for future years that account for, among other things, the ongoing effects of economic growth and adopted emissions control requirements. The SIP should include documentation to explain how the emissions projections were calculated.

2. Emissions Inventories in the Logan, UT-ID $PM_{2.5}$ Moderate Plan.

The base year inventory should represent typical conditions at a recent point in time, and becomes the basis for comparisons with all projections into the future. The foundation that UDAQ used for each of these specific inventories is the 2008 triennial inventory, which was the most recent comprehensive inventory submitted to the EPA under subpart A of 40 CFR part 51. Utah used the 2008 inventory to back-cast and adjust for certain episodic conditions, and forecast a representation of more typical conditions to develop the projected inventories.

The Logan, UT-ID nonattainment area emissions inventory includes emissions estimates from point sources, area sources, on-road mobile sources, and off-road mobile sources. The methodologies used to derive the 2010 base year inventory for $PM_{2.5}$ are as follows:

- The point source emissions inventory is based on the 2008 triennial National Emissions Inventory (NEI) data of actual emissions reported by all permitted facilities. UDAQ used data from the Regional Economic Models, Inc. (REMI) to project the 2008 actual point source emissions to 2010.
- Activity data was used to calculate emissions for area source categories. This data includes population, employment, vehicle miles traveled (VMT), fuel usage, agriculture, and other estimates covering a wide range of activities, in conjunction with the 2008 triennial NEI.
- The inventory for the on-road mobile source category includes emissions for mobile sources such as trucks, cars, buses, and motorcycles. It was prepared by UDAQ using the EPA's Motor Vehicle Emissions Simulator (MOVES2010a), the most current version of the model available at the time the inventory was

prepared, in conjunction with information generated by travel demand models such as vehicle speeds and miles traveled.

- The non-road mobile source category includes miscellaneous non-road engines, aircraft, and locomotives. Miscellaneous non-road emissions were computed by using the EPA NONROAD Model, version 2008.1.0. Locomotive emissions were estimated by applying the EPA emission factors to the total amount of fuel used by locomotives. Aircraft emissions were estimated by applying aircraft specific activity data and the Emissions Dispersion Modeling System (EDMS), version 5.1.2.
- Paved road emissions (coarse particulate matter (PM_{10}) and $PM_{2.5}$ fugitive dust) were estimated by UDAQ based on the EPA's January 2011 version of AP-42, Section 13.2.1.

Table 1 below provides a summary of winter daily average inventories of source categories for direct $PM_{2.5}$ and $PM_{2.5}$ precursors for the 2010 base year and 2015 projected year. The base year inventory provides the basis for the control measure analysis in the Logan, UT-ID Moderate $PM_{2.5}$ SIP and the projected year inventory provides the model projection for emission reductions found in the Logan, UT-ID Moderate $PM_{2.5}$ SIP.

Table 1 – Logan, UT-ID Typical Winter Inversion Weekday in tons per day (tpd) of Source Categories for Direct $PM_{2.5}$ and $PM_{2.5}$ Precursors for the 2010 Baseline Year and 2015 Projected Year.

	2010					**2015**				
Source Category	**Direct $PM_{2.5}$**	**NO_x**	**SO_2**	**VOC**	**NH_3**	**Direct $PM_{2.5}$**	**NO_x**	**SO_2**	**VOC**	**NH_3**

Area Sources	0.54	1.63	0.26	4.16	4.31	0.40	1.59	0.27	3.75	4.08
Mobile Sources	0.67	6.48	0.04	4.99	0.12	0.32	4.49	0.03	3.36	0.10
Non-Road Mobile Sources	0.13	1.15	0.02	2.28	0.00	0.10	0.81	0.01	1.77	0.00
Point Sources	0.00	0.02	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00
Total*	**1.35**	**9.28**	**0.32**	**12.06**	**4.43**	**0.82**	**6.89**	**0.31**	**8.88**	**4.19**

*Totals might have slight deviations from the sum of the source categories due to rounding.

The composition of the Area Source Category in the table above includes: agriculture – livestock waste; bulk gasoline terminals; commercial cooking; dust – construction dust; fuel combination – commercial/institutional – coal, natural gas, oil, and other; fuel combination – residential – oil, other, and wood; gas stations, industrial processes – not elsewhere classified (NEC); miscellaneous non-industrial NEC; mobile – non-road equipment – diesel; solvent – consumer and commercial solvent use, degreasing, dry cleaning, graphic arts, industrial surface coating and solvent use, non-industrial surface coating; and waste disposal.

3. The EPA's Evaluation and Proposed Action: Base Year and Projected Emissions Inventories.

The $PM_{2.5}$ Implementation Rule sets forth several requirements for the base year inventory and projected year inventory for Moderate area attainment plans. 40 CFR 51.1008(a)(1) and 40 CFR 51.1008(a)(2), respectively. The EPA has also issued guidance for the preparation of emissions inventories for implementation of the $PM_{2.5}$ and ozone standards, along with regional haze requirements.[4] We propose to determine that the base year and

[4] "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations," Office of Air Quality Planning and Standards,

projected year inventories meet the requirements in the CAA and $PM_{2.5}$ Implementation Rule and was prepared consistently with the recommendations in the guidance.

Specifically, the base year inventory satisfies each requirement found in 40 CFR 51.1008(a)(1). First, the base year of 2010 was not one of the three years (2006-2008) used for designation of the area as nonattainment. See 40 CFR 51.1008(a)(1)(i). However, the state has justified 2010 as a technically appropriate inventory year, and the use of a later year is consistent with the statutory requirement in section 172(c)(3) to use a "current" inventory. Second, the inventory represents actual, average season-day emissions. 40 CFR 51.1008(a)(1)(ii) and (a)(1)(iii). Third, the inventory provides emissions of all precursors of $PM_{2.5}$. 40 CFR 51.1008(a)(1)(iv). Fourth, emissions of point sources are reported according to thresholds found in 40 CFR part 51, subpart A. 40 CFR 51.1008(a)(1)(v).

The projected year inventory satisfies each requirement in 40 CFR 51.1008(a)(2). First, the 2015 projected year inventory was the most expeditious year that showed modeled $PM_{2.5}$ concentrations below the 24-hour $PM_{2.5}$ NAAQS. 40 CFR 51.1008(a)(2)(i). Second, the projected emission values were derived from the same sources included in the base year inventory and included projected emissions based on growth and contraction pertaining to controls and other potential causes. 40 CFR 51.1008(a)(2)(ii). Third, the temporal period of projected emissions was the same as the base year inventory, average season-day. 40 CFR 51.1008(a)(2)(iii). Fourth, the inventory provides emissions of all precursors of $PM_{2.5}$. 40 CFR 51.1008(a)(2)(iv). Fifth, all sources (point, stationary nonpoint, and mobile sources) were included in the projected inventory at the same level of detail found in the base year inventory.

40 CFR 51.1008(a)(2)(v) and (a)(2)(vi).

The base year inventory in the Logan, UT-ID Moderate $PM_{2.5}$ SIP is based on the most current and accurate information available to the State at the time the SIP was being developed. Additionally, the base year and projected inventories met all minimum requirements found in 40 CFR 51.1008(a)(1) and (2), and the inventories addressed all source categories in the Logan, UT-ID nonattainment area and were developed consistent with the EPA's inventory guidance.[5] For these reasons, we are proposing to approve the 2010 base year emissions inventory and the 2015 projected emissions inventory in the Logan, UT-ID $PM_{2.5}$ SIP as meeting the requirements of CAA section 172(c)(3). We are also proposing to find that the base year and projected inventories in the SIP provide an adequate basis for development of the Logan, UT-ID Moderate $PM_{2.5}$ SIP.

B. Modeled Attainment Demonstration

1. Requirements for the Modeled Attainment Demonstration.

Air quality modeling is used to establish emissions attainment targets, the combination of emissions of $PM_{2.5}$ and $PM_{2.5}$ precursors that the area can accommodate and still attain the standard, and to assess whether the proposed control strategy will result in attainment of the standard. Air quality modeling is performed for a base year and compared to air quality

[5] Utah Moderate $PM_{2.5}$ SIP TSD, Chapter 1 – Inventory General, Section b – Inventory Preparation Plan. The scope for UDAQ's $PM_{2.5}$ Emission Inventory Preparation Plan includes: EPA's "Emission Inventory Improvement Program," "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations" dated August 2005, "Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, $PM_{2.5}$, and Regional Haze" dated April 2007, and "Guidance for Creating Annual On-Road Mobile Source Emission Inventories for $PM_{2.5}$ Nonattainment Areas for Use in SIPs and Conformity" dated August 2005. These documents helped to facilitate the collection of point, area, mobile, biogenic, and geogenic emission inventory data.

monitoring data collected during that year in order to determine model performance. Once the model performance is determined to be acceptable, future year changes to the emissions inventory are simulated with the model to determine the relationship between emissions reductions and changes in ambient air quality. To project future design values (FDVs), the model response to emission reductions, in the form of Relative Response Factors (RRFs), is applied to monitored design values from the base year.

At the time the Logan, UT-ID Moderate $PM_{2.5}$ SIP was developed, the EPA's recommendations for model input preparation, model performance evaluation, use of the model output for the attainment demonstration and modeling documentation were described in Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, $PM_{2.5}$, and Regional Haze, EPA-454/B-07-002, April 2007 ("Modeling Guidance Update").[6]

The EPA recommends that states prepare a modeling protocol as part of their modeled attainment demonstration, and the Modeling Guidance describes the topics to be addressed in the modeling protocol. A modeling protocol should detail and formalize the procedures for conducting all phases of the modeling analysis, such as describing the background and objectives, creating a schedule and organizational structure, developing the input data, conducting model performance evaluations, interpreting modeling results, describing procedures for using the model to demonstrate whether proposed strategies are sufficient to attain the applicable standard, and producing documentation to be submitted for the EPA

[6] The EPA Modeling Guidance and Modeling Guidance Update are available on EPA's SCRAM Website, Web page: http://www.epa.gov/scram001/guidance_sip.htm.

Regional Office review and approval prior to actual modeling.

In addition to a modeled attainment demonstration, which focuses on locations with an air quality monitor, EPA's Guidance describes an Unmonitored Area Analysis (UAA). This analysis is intended to ensure that a control strategy leads to reductions in $PM_{2.5}$ at other locations that have no monitor but that might have base year and future baseline (projection year) ambient $PM_{2.5}$ levels exceeding the standard.

Under the $PM_{2.5}$ Implementation Rule, the attainment demonstration must show that the projected attainment date is as expeditious as practicable. 40 CFR 51.1392(a)(1). The demonstration must meet the general modeling requirements in Appendix W to part 51 and must include the emission inventory data, modeling results, and emission reduction analyses that were used in the demonstration. 40 CFR 51.1392(a)(2). The base year for the emissions inventory must be one of the three years used for designation or another technically appropriate year that the state has justified. 40 CFR 51.1392(a)(3). Finally, the attainment demonstration must be consistent with the control strategy in the attainment plan. 40 CFR 51.1392(a)(4).

2. Modeled Attainment Demonstration in the Logan, UT-ID $PM_{2.5}$ Moderate Plan.

UDAQ conducted a technical analysis to support the development of the Logan, UT-ID Moderate $PM_{2.5}$ SIP. Their analyses included preparation of emissions inventories, meteorological data, and the application and evaluation of a regional photochemical model. UDAQ's air quality analyses were conducted using the Community Multiscale Air Quality (CMAQ) Model version 4.7.1, with emissions inputs generated using the Sparse Matrix Operator Kernel Emissions (SMOKE) processing system, and meteorological inputs developed using the Weather Research and Forecasting (WRF) model.

The modeling protocol for the Moderate $PM_{2.5}$ SIP is contained in the docket for this action and includes descriptions of the photochemical modeling. Additional description of the photochemical modeling is covered in the Weight of Evidence Analysis (WOEA).[7] The protocol was reviewed by the EPA and covers all of the topics recommended in the Modeling Guidance Update.

The air quality modeling and results are summarized in Chapter 5 – Attainment Demonstration of the Logan, UT-ID $PM_{2.5}$ SIP and in Chapter 4 – Air Quality Modeling of the TSD. Additionally, the Logan, UT-ID $PM_{2.5}$ SIP included a UAA in Chapter 4 of the TSD within the WOEA (section 1.5).

3. Evaluation of the Air Quality Modeling in the Logan, UT-ID $PM_{2.5}$ SIP.

As mentioned above, the attainment demonstration must show that the Moderate nonattainment area will attain the standard as expeditiously as practicable but no later than the end of the sixth calendar year after the area's designation. The Logan, UT-ID Moderate $PM_{2.5}$ nonattainment area attainment date was December 31, 2015. As the Moderate $PM_{2.5}$ attainment plan for the Logan, UT-ID nonattainment area was due December 31, 2014 (79 FR 31566; June 2, 2014), one year before the six-year mark, the EPA proposes to determine that the projected attainment date of December 31, 2015, was as expeditious as practicable. We also note that one of the control measure implemented in the Logan, UT-ID nonattainment area, the I/M program, was not fully implemented until 2015. This supports the conclusion that the attainment date, December 31, 2015, was as expeditiously as practicable.

The EPA proposes to approve the attainment demonstration as meeting general

[7] Chapter 4 – Air Quality Modeling of the Logan, UT-ID Moderate $PM_{2.5}$ SIP TSD.

modeling requirements in Appendix W. The joint Utah and Idaho modeling included in Chapter 4 of the TSD and Chapter 5 of the Logan, UT-ID Moderate $PM_{2.5}$ SIP followed applicable EPA modeling guidance in predicting that state and federal control measures to address point sources, area sources, on-road mobile sources, and off-road mobile sources would bring $PM_{2.5}$ concentrations below 35 $\mu g/m^3$ by December 31, 2015, in the Logan, UT-ID nonattainment area. The air quality model performance appears generally acceptable and usually within stated performance goals; speciation and composition of the modeled $PM_{2.5}$ matches the observed speciation, with good agreement in the magnitude of $PM_{2.5}$ and good replication of the episodic buildup and clear out of $PM_{2.5}$; however, the meteorological model does not always accurately simulate the intensity and persistence of cold air pool inversion conditions, and as a result, the model sometimes clears out the simulated $PM_{2.5}$ too early at the end of an episode.

We note that the $PM_{2.5}$ Implementation Rule provides that a state's modeled attainment demonstration must establish that an area will attain the NAAQS by the projected attainment date. However, for purposes of modeling, a state may elect to demonstrate that the area will meet the numerical level of the NAAQS for the attainment year (81 FR 58010, at page 58054). The EPA authorizes this approach because of the potential availability of extensions of the Moderate area attainment date under relevant provisions section 188(d) of the CAA. In other words, if ambient data show attainment-level concentrations in the applicable statutory attainment year, the state may be eligible for up to two one-year extensions of the attainment date. *See* 40 CFR 51.1005. Using this provision, a state may be able to attain the NAAQS by the extended attainment date, even if the measured design value (a three-year average) for an

area does not meet the NAAQS by the end of the 6th calendar year after designation. For this reason, the $PM_{2.5}$ Implementation Rule indicates that it is acceptable for a state to model air quality levels for the final statutory attainment year in which the area is required to attain the standard, in this case, 2015. In the Logan, UT-ID nonattainment area, both measured and modeled $PM_{2.5}$ concentrations in 2015 were consistent with meeting the numerical level of the NAAQS in both Utah and Idaho, thus confirming the attainment demonstration.[8]

Additionally, UDAQ included a UAA in the WOEA found in Chapter 4 of the TSD. The UAA showed that five grid-cells north of the Franklin, ID monitor had calculated future design values (FDVs) over 35.5 µg/m^3. UDAQ was not sure why the predicted peak $PM_{2.5}$ concentrations were high because there were no large point sources in the county, or any other emissions sources that could produce the level of emissions in the specific grid-cells to cause this concentration. The WOEA explains that the uncertainty in UDAQ's UAA method may be responsible for the high values north/northwest of the Franklin, ID monitor. EPA modeling guidance[9] suggests using the Model Attainment Test Software (MATS) post-processor to perform a UAA. However, the MATS version 2.5.1 that was available when the Logan, UT-ID Moderate $PM_{2.5}$ SIP was developed did not have the ability to perform a UAA for daily average $PM_{2.5}$. As a result, UDAQ attempted to implement a UAA methodology for the Logan, UT-ID Moderate $PM_{2.5}$ nonattainment area UAA that was comparable to what was recommended by the EPA guidance, but the gradient adjustment and speciation techniques

[8] The Logan, UT-ID Moderate $PM_{2.5}$ nonattainment area monitor located in Logan, UT, recorded a valid 2015 98th percentile of 29.0 µg/m^3. See the document titled "May 8, 2017 Logan, UT-ID $PM_{2.5}$ Memo" in the docket to this action.

[9] April 2007; EPA-454/B-07-002; Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, $PM_{2.5}$, and Regional Haze.

were necessarily simpler.

The EPA worked with UDAQ to develop the methodology for the UAA in the Logan, UT-ID Moderate $PM_{2.5}$ nonattainment area and agrees with UDAQ's conclusion that there were no large point sources within the high concentration grid-cells and the potentially high values north/northwest of the Franklin, ID monitor are possibly due to the uncertainty inherent in UDAQ's UAA method. Additionally, the EPA reviewed available monitoring data for 2015 at the Logan and Franklin monitors for which the 98^{th} percentiles are 29.0 $\mu g/m^3$ and 18.8 $\mu g/m^3$, respectively. The monitoring data indicates that the high values in the UAA grid cells north/northwest of the Franklin monitor are likely an anomaly and the EPA will continue to work with UDAQ to refine their UAA method for future use.

The EPA is therefore proposing to approve the attainment demonstration portion of the Logan, UT-ID Moderate $PM_{2.5}$ SIP.

C. Reasonably Available Control Measures/Reasonably Available Control Technology and Additional Reasonable Measures

1. Requirements for the RACM/RACT and Additional Measures.

As mentioned above, section 172(c)(1) of the Act (from subpart 1) requires that attainment plans, in general, provide for the implementation of all RACM (including RACT) as expeditiously as practicable. Section 189(a)(1)(C) (from subpart 4) requires Moderate area plans to include provisions to assure that RACM is implemented no later than four years after designation. The Logan, UT-ID area was designated nonattainment for the 2006 24-hour $PM_{2.5}$ NAAQS on November 13, 2009 (74 FR 58688). However, the Logan, UT-ID nonattainment area was not classified as Moderate under subpart 4 until the EPA published the Classification

and Deadlines Rule on June 2, 2014 (79 FR 31566). Because the EPA designated the Logan, UT-ID nonattainment area effective December 14, 2009, the area was required to implement RACM/RACT no later than December 14, 2013.

The $PM_{2.5}$ Implementation Rule defines RACM (including RACT) as any technologically and economically feasible measure that can be implemented in whole or in part within four years after the effective date of designation of a $PM_{2.5}$ nonattainment area and that achieves permanent and enforceable reductions in direct $PM_{2.5}$ emissions and/or $PM_{2.5}$ precursor emissions from sources in the area.

Under the $PM_{2.5}$ Implementation Rule, the state must first identify all sources of emissions of direct $PM_{2.5}$ and all $PM_{2.5}$ precursors (NO_x, SO_2, VOC, and NH_3) in the nonattainment area, in accordance with the emission inventory requirements described above. 40 CFR 51.1010(a)(1). The state must then identify all potential control measures to reduce emissions from those source categories, except for source categories or major stationary sources for which the state submits an acceptable precursor demonstration. 40 CFR 51.1010(a)(2). The state next determines whether the identified potential control measures are technologically feasible and whether any of the identified technologically feasible control measures are economically feasible. 40 CFR 51.1010(a)(3). The state must provide a detailed written justification for any potential control measure that has been excluded as technologically or economically infeasible. 40 CFR 51.1010(a)(3)(iii). The state may also eliminate potential control measures that would take longer than six years to implement. 40 CFR 51.1010(a)(3)(i).

Section 172(c)(6) of the Act requires states to implement “other measures” necessary to provide for timely attainment in an area. The $PM_{2.5}$ Implementation Rule interprets this

provision to require "additional reasonable measures," which are those measures and technologies that can be applied at sources in the nonattainment area that are otherwise technologically and economically feasible but can only be implemented in whole or in part later than four years after designation.[10]

2. RACM/RACT in the Logan, UT-ID $PM_{2.5}$ Moderate Plan.

a. Major Stationary Sources

In developing the emissions inventories underlying the SIP, UDAQ used the criteria of 40 CFR part 51, subpart A for air emissions reporting requirements to establish a 100 tons per year (tpy) threshold for identifying a sub-group of major stationary sources that would be evaluated individually for the establishment of emissions limits. Under 40 CFR 51.1000, the definition for major stationary source means "Any stationary source of air pollutant(s) that emits, or has the potential to emit, 100 tpy or more of direct $PM_{2.5}$ or any $PM_{2.5}$ precursor in any Moderate nonattainment area for the $PM_{2.5}$ NAAQS, or 70 tpy or more of direct $PM_{2.5}$ or any $PM_{2.5}$ precursor in any Serious nonattainment area for the $PM_{2.5}$ NAAQS."[11] UDAQ used the Moderate threshold for emissions of direct $PM_{2.5}$ and all $PM_{2.5}$ precursors for all major stationary sources in the modeling domain. Additionally, UDAQ applied the 100 tpy threshold to the sources' potential to emit as well as their actual emissions. UDAQ determined that according to Moderate area threshold, Pepperidge Farm Inc., was the only source included on this list that is located in the Logan-UT-ID nonattainment area. Table 2 provides actual emission totals in tpy for the Pepperidge Farm Inc., plant for 2008.

[10] 81 FR 58010, 58043; August 24, 2016.
[11] 81 FR 58010, 58152; August 24, 2016.

Table 2 – Pepperidge Farm Incorporated 2008 Criteria Pollutant Inventory.

2008 Plantwide Emission Totals (tpy)					
Process	**$PM_{2.5}$**	**SO_2**	**NO_x**	**VOC**	**NH_3**
Process & Fuel Emissions	0.48	0.03	5.20	0.29	0.03
Evaporative Emissions	-	-	-	0.32	-
Engines	0.02	0.01	0.13	0.01	0.00
Bakery	-	-	-	149.58	-
Totals	**0.50**	**0.04**	**5.33**	**150.20**	**0.03**

UDAQ determined that data from the REMI would be used to project the 2008 actual major stationary source emissions to 2010. On March 23, 2012, Pepperidge Farm Inc., applied to be designated as a synthetic minor source and on May 21, 2012, UDAQ concurred and issued a construction permit that restricted emissions below the major stationary source threshold. Specifically, VOC emissions were limited to 93.81 tpy per rolling 12-month period. Since Pepperidge Farm Inc. was designated as a synthetic minor source in 2012, the source was not included in the 2015 projection inventory as a major stationary source, but in the area source inventory. Table 3 below shows emissions in tons per day for the 2010 baseline and projected 2015 inventories.

Table 3 – Pepperidge Farm Incorporated Baseline 2010 and Projected 2015 Emissions Inventories of Typical Winter Inversion Day (tpd) as a Major Stationary Source.

	2010				**2015**			
	$PM_{2.5}$	**NO_x**	**VOC**	**SO_2**	**$PM_{2.5}$**	**NO_x**	**VOC**	**SO_2**
Pepperidge Farms Inc.	0.00	0.02	0.63	0.00	-	-	-	-

For the Logan, UT-ID Moderate $PM_{2.5}$ SIP, UDAQ concluded that there were no major stationary sources with actual emissions or potential to emit 100 tpy of $PM_{2.5}$ or any $PM_{2.5}$ plan

precursors. As stated above, this conclusion is due to Pepperidge Farm Inc., reducing their emissions to be designated as a synthetic minor source.

b. On-Road Mobile Sources

Through the course of the development of the Logan, UT-ID $PM_{2.5}$ SIP, UDAQ identified a motor vehicle I/M program as RACM to achieve reductions of $PM_{2.5}$ precursor emissions of NO_x and VOC. Subsequently, the EPA approved the revisions involving amendments to Utah's SIP Section X, Vehicle Inspection and Maintenance Program, Part A, General Requirements and Applicability; the addition of Section X, Vehicle Inspection and Maintenance Program, Part F, Cache County in Utah's SIP; and revisions to Utah's Administrative Rules on September 9, 2015 (80 FR 54237).

The EPA noted in the September 9, 2015, final rule that under subparts 1 and 4 of the CAA, Cache County's I/M program is not a CAA mandatory or required I/M program; and is therefore, not held to the same level of applicability requirements as found in 40 CFR part 51, subpart S, I/M program requirements. Within Utah's SIP, Part F of Section X, in conjunction with Part A of Section X, were designed by the County and the State to meet the minimum applicable I/M provisions and requirements set forth in 40 CFR 51, subpart S. It is also noted in Part F of Utah's SIP that although only a portion of Cache County was designated as nonattainment for the 2006 $PM_{2.5}$ 24-hour NAAQS, the mandatory I/M program will be implemented county-wide. The I/M program began operation on January 1, 2014, where motor vehicles are subject to a mandatory biennial emissions inspection. Emissions inspections were required in odd-numbered years for vehicles with an odd-numbered model year and even-numbered years for vehicles with an even-numbered model year.

The EPA is not revisiting the September 9, 2015 (80 FR 54237) approval of Cache County's I/M program with this action but is only acting on UDAQ's RACM analysis pertaining to this program. Within Chapter 5 of the TSD, UDAQ provides their review of several control measures and their final RACM conclusions for mobile sources in the Logan, UT-ID nonattainment area.

The potential control measures identified and evaluated by UDAQ include: (1) a mandatory I/M program in Logan where such a program did not previously exist; (2) reducing the Reid vapor pressure (RVP) of gasoline to control VOC emissions; and (3) implementing a bundle of voluntary control measures (e.g., trip reduction, curtailing of operations/activities and driving on "yellow" and "red" air quality days, diesel retrofits and replacement of gasoline vehicles with alternate-fuel vehicles such as those running on compressed natural gas (CNG) or electricity, and gasoline/electric hybrids). UDAQ modeled these potential control measures but found that the only measure that provided any significant emission benefit was to include a mandatory I/M program for the Utah portion of the Logan, UT-ID nonattainment area and to implement the program throughout Cache County.[12]

The preliminary cost analysis for extending the I/M program to the Logan, UT-ID nonattainment area shows a cost effectiveness of approximately $6,000 to $8,000 per ton of emissions reduced per year. UDAQ concluded that this was within the range of costs associated with other control measures which were under consideration for inclusion in the Logan, UT-ID $PM_{2.5}$ SIP; therefore, it was economically feasible. Furthermore, similar programs have been successfully operated in Utah, Salt Lake, Davis, and Weber Counties and

[12] Chapter 5 – Control Strategies of the Utah Moderate $PM_{2.5}$ SIP TSD.

have proven to be both technologically and economically feasible.

The EPA's motor vehicle emissions model, MOVES2010a, was used to identify the effectiveness of the I/M program in the Logan, UT-ID nonattainment area. For 2015, MOVES predicted emission reductions of 0.21 tpd for NO_x, and 0.21 tpd for VOC. UDAQ concluded that the I/M program met RACM and was retained as part of the overall control strategy for the area.

Additionally, UDAQ provided information for On-Road Mobile programs that were promulgated at the federal level. The Tier 2 program was promulgated by the EPA on April 10, 2000 (65 FR 6698; February 10, 2000) and was phased in between 2004 and 2008. Tier 2 set a single set of standards for all light duty vehicles and required refiners to reduce gasoline sulfur levels nationwide. UDAQ provided estimates provided by the EPA that the Tier 2 program would reduce oxides of nitrogen emission by at least 2,220,000 tpy nationwide in 2020.[13] Tier 2 has also contributed in reducing VOC and direct PM emissions from light duty vehicles. Additional on-road mobile source emissions improvements that UDAQ highlights are from federal regulations for heavy-duty diesel vehicles. The Highway Diesel Rule, which aimed at reducing pollution from heavy-duty diesel highway vehicles, was finalized on January 18, 2001 (66 FR 5002). Under the rule, beginning in 2007, (with a phase-in through 2010) heavy-duty diesel highway vehicle emissions were required to be reduced by as much as 90 percent with a goal of complete fleet replacement by 2030. In order to enable the updated emission reduction technologies necessitated by the rule, beginning in 2006 (with a phase-in through 2009) refiners were required to begin producing cleaner-burning ultra-low sulfur diesel fuel.

[13] 65 FR 6698; February 10, 2000.

Specifically, the rule required a 97 percent reduction in sulfur content from 500 parts per million (ppm) to 15 ppm. This program was estimated to reduce PM and oxides of nitrogen from heavy duty engines by 90 percent and 95 percent below current standard levels set out in the rule, respectively.[14] Table 4 below shows emissions in tons per day for the 2010 baseline and projected 2015 inventories.

Table 4 – On-Road Mobile Source Baseline 2010 and Projected 2015 Emissions Inventories of Typical Winter Inversion Day (tpd).

	2010				**2015**			
	$PM_{2.5}$	**NO_x**	**VOC**	**SO_2**	**$PM_{2.5}$**	**NO_x**	**VOC**	**SO_2**
Cache County, UT	0.37	6.48	4.99	0.04	0.28	4.49	3.35	0.03

c. Off-Road Mobile Sources

UDAQ did not consider any additional SIP controls for off-road mobile sources beyond those already promulgated at the federal level. Emission reductions from these federal controls were taken indirectly because their effectiveness has been incorporated into the NONROAD model. Table 5 below summarizes the 2010 base year and 2015 projection year annual emissions from non-road mobile sources in Cache County which contains the Logan, UT-ID Moderate $PM_{2.5}$ nonattainment area.

Table 5. 2010 Base Year and 2015 Projection Year Non-Road Mobile, Aircraft, Locomotives Emissions Inventory (tpy).

	2010				**2015**			
	NO_x	**VOC**	**$PM_{2.5}$**	**SO_2**	**NO_x**	**VOC**	**$PM_{2.5}$**	**SO_2**

[14] 66 FR 5002; January 18, 2001.

Cache County	492.47	1,144.85	61.99	8.55	360.63	901.09	49.21	2.88

Chapter 5 of UDAQ's TSD provides a detailed description of what control measures were included in the modeling.

3. EPA's Evaluation of the RACM/RACT Regulations.

The EPA is proposing to approve UDAQ's determination that a RACT analysis for the Pepperidge Farms facility was not necessary, as the SIP demonstrates attainment based on the other control measures included in the SIP. The EPA agrees with UDAQ's underlying justification for including the I/M program in the Logan, UT-ID attainment plan. UDAQ analyzed the measure as technologically and economically feasible and therefore RACM; however, the measure was implemented in the fifth and sixth year after designation. UDAQ did not have the benefit of the EPA's distinction in the $PM_{2.5}$ Implementation Rule between RACM and additional reasonable measures at the time the RACM analysis for the I/M program was developed. We therefore consider the I/M program to be an additional reasonable measure and we are proposing to approve it as such. The EPA notes that, with the exception of timing of control measure implementation, the standard for the two types of control measures is the same: technological and economic feasibility. Additionally, the EPA agrees with UDAQ's reliance on federal on-road mobile regulations for other on-road mobile emission reductions in the Logan, UT-ID $PM_{2.5}$ SIP and is proposing to approve UDAQ's determination. We are also proposing to approve UDAQ's determination that additional off-road measures are not necessary given that the federal measures will provide further emission reductions for the Logan, UT-ID Moderate $PM_{2.5}$ SIP. The EPA is not proposing to determine whether the Logan, UT-ID Moderate $PM_{2.5}$ attainment SIP has fully met all requirements for RACM/RACT found

in CAA subparts 1 and 4. This determination will be made at a later date.

D. Transportation Conformity and Motor Vehicle Emission Budgets.

1. Requirements for Transportation Conformity and MVEBs.

Transportation conformity is required by section 176(c) of the CAA. The EPA's conformity rule at 40 CFR 93, Subpart A requires that transportation plans, programs, and projects conform to SIPs and establishes the criteria and procedures for determining whether or not they conform. Conformity to a SIP means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS or any interim milestone. To effectuate its purpose, the EPA's conformity rule requires a demonstration that emissions from a Metropolitan Planning Organization's (MPO) Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP), involving Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funding or approval, are consistent with the MVEB(s) contained in a control strategy SIP revision or maintenance plan (40 CFR 93.101, 93.118, and 93.124). A MVEB is defined as the level of mobile source emissions of a pollutant relied upon in the attainment, RFP or maintenance demonstration to attain or maintain compliance with the NAAQS in the nonattainment or maintenance area. Further information concerning the EPA's interpretations regarding MVEBs can be found in the preamble to the EPA's November 24, 1993, transportation conformity rule (see 58 FR 62193 – 62196).

The EPA notes that $PM_{2.5}$ attainment plans should identify MVEBs for direct $PM_{2.5}$, NO_x and all other $PM_{2.5}$ precursors where on-road mobile source emissions are determined to significantly contribute to $PM_{2.5}$ levels in the nonattainment area. For the Logan, UT-ID $PM_{2.5}$

SIP, UDAQ identified mobile source VOC emissions as a significant contributor to the formation of $PM_{2.5}$ in the Logan, UT-ID $PM_{2.5}$ nonattainment area. For direct $PM_{2.5}$ SIP MVEBs, the MVEB should include direct $PM_{2.5}$ motor vehicle emissions from tailpipes, brake wear, and tire wear. In addition, a state must also consider whether re-entrained road dust is a significant contributor and should be included in the direct $PM_{2.5}$ MVEB.[15] With respect to this requirement, the EPA reviewed information, data, and an analysis from the UDAQ that sufficiently documented that re-entrained road dust emissions were negligible and meet the criteria of 40 CFR 93.102(b)(3) for not needing to be included in the direct $PM_{2.5}$ MVEB.

2. MVEBs Identified in the Logan, UT-ID Moderate $PM_{2.5}$ SIP.

Utah's Logan, UT-ID $PM_{2.5}$ SIP Section IX. Part A.23 was submitted to meet the requirements of part D of title I of the CAA, subparts 1 and 4 for "Moderate" $PM_{2.5}$ nonattainment areas. The State's attainment plan specified the maximum mobile source emissions of $PM_{2.5}$, NO_x and VOC allowed in 2015, the attainment year. These mobile source emissions were then identified by the State as the SIP's MVEBs and are to be used by the Cache MPO to demonstrate transportation conformity for the Cache MPO's RTP and TIP. The attainment plan's 2015 MVEBs include direct $PM_{2.5}$, NO_x, and VOC emissions from vehicle exhaust/evaporation, tire wear and brake wear. The identified MVEBs were included in Table 7.1 of the SIP and are identified as: Direct $PM_{2.5}$ is 0.32 tpd, NO_x is 4.49 tpd, and VOC is 3.23 tpd.

We note that prior to December 31, 2015, the EPA had found the Logan, UT-ID $PM_{2.5}$

[15] 40 CFR 93.102(b) and 93.122(f); *see also* conformity rule preamble at 69 FR 40004, 40031-40036 (July 1, 2004).

MVEBs were adequate as described in the transportation conformity adequacy provisions of 40 CFR 93.118(e). Under 40 CFR 93.118(e)(4)(iv), we review a submitted plan to determine whether the MVEBs, when considered together with all other emissions sources, are consistent with applicable requirements for RFP, attainment, or maintenance (whichever is relevant to a given SIP submission). We described our process for determining the adequacy of submitted SIP MVEBs in our July 1, 2004, Transportation Conformity Rule Amendments (69 FR 40004). We used these resources in making our adequacy determination.

On March 23, 2015, we announced receipt of the Logan, UT-ID $PM_{2.5}$ attainment plan at the EPA's Office of Transportation and Air Quality (OTAQ) adequacy website and requested public comment on the adequacy of the MVEBs by April 22, 2015. We did not receive any comments during the comment period. We sent a letter to the UDAQ on June 17, 2015, stating that the submitted Logan, UT-ID $PM_{2.5}$ attainment plan SIP revision MVEBs were adequate for transportation conformity purposes. We announced our adequacy finding in the Federal Register on September 11, 2015 (80 FR 54788); effective September 28, 2015.

3. MVEB Trading, for Purposes of Demonstrating Transportation Conformity, in the Logan, UT-ID $PM_{2.5}$ SIP.

The EPA's transportation conformity rule allows for trading between direct $PM_{2.5}$ and NO_x and VOC precursor MVEBs, so long as the SIP establishes an appropriate mechanism for such trades.[16]

As discussed in section 7.6 "Transportation Conformity $PM_{2.5}$ Budgets" of the Logan UT-ID $PM_{2.5}$ attainment plan, the SIP revision establishes a MVEB trading mechanism to

[16] 40 CFR 93.124(b).

allow for future increases in on-road mobile sources direct $PM_{2.5}$ emissions to be offset by future decreases in NO_x and VOC precursor emissions from on-road mobile sources. These ratios were developed from data from the air quality attainment plan's dispersion modeling. Section 7.6 of the SIP and the Logan UT-ID $PM_{2.5}$ attainment plan's Technical Support Documentation Weight-of-Evidence information[17] provide the following modeling-derived trading ratios: future increases in on-road mobile sources direct $PM_{2.5}$ emissions may be offset with future decreases in NO_x emissions from on-road mobile sources at a NO_x to $PM_{2.5}$ ratio of 13.66 to 1 and/or future decreases in VOC emissions from on-road mobile sources at a VOC to $PM_{2.5}$ ratio of 22.84 to 1.

The SIP notes that this trading mechanism will only be used by the Cache MPO for transportation conformity determination analyses for years after 2015. The SIP further notes that to ensure that the trading mechanism does not impact the ability to meet the NO_x or VOC budgets, the NO_x emission reductions available to supplement the direct $PM_{2.5}$ MVEB shall only be those remaining after the 2015 NO_x MVEB has been met. Also, the VOC emissions reductions available to supplement the direct $PM_{2.5}$ budget shall only be those remaining after the 2015 VOC MVEB has been met. The SIP further articulates that clear documentation of the calculations used in the MVEB trading are to be included in the conformity determination analysis as prepared by the Cache MPO.

4. Evaluation and Proposed Action.

The EPA has evaluated the Logan, UT-ID $PM_{2.5}$ attainment plan's emission inventories

[17] "$PM_{2.5}$ State Implementation Plan Weight-Of-Evidence to the Model Attainment Test," section 1.9, pages 64 and 65.

and attainment demonstration modeling as described in sections above. Based on our evaluation, we have determined that the direct $PM_{2.5}$, NO_x, and VOC MVEBs are appropriately derived from the SIP and are acceptable. We have also evaluated the description and derivation of the MVEB trading mechanism and the supporting data from the SIP's attainment demonstration modeling/Weight-Of-Evidence information and find those acceptable. Therefore, we are proposing to approve the Logan UT-ID $PM_{2.5}$ attainment plan's MVEBs of direct $PM_{2.5}$ of 0.32 tpd, NO_x of 4.49 tpd, and VOC of 3.23 tpd. In addition, we are also proposing to approve the MVEB trading mechanism as documented in section 7.6 of the SIP.

V. Summary of the EPA's Proposed Action

For the reasons discussed in section IV above, under CAA section 110(k)(3), the EPA is proposing to approve the emissions inventory, modeled attainment demonstration, determination for Major Stationary Source RACT, determination for On-Road Mobile Sources RACM, determination of Cache County I/M program as additional reasonable measures, determination for Off-Road Mobile Sources RACM, and 2015 MVEB for the Logan, UT-ID $PM_{2.5}$ Moderate SIP.

A. Proposed Approval

1. The EPA is proposing the following actions on the Logan, UT-ID $PM_{2.5}$ SIP:

    a. Approve the 2010 base year and 2015 projection year emissions inventories;

    b. Approve the modeled attainment demonstration;

    c. Approve the RACM/RACT and additional reasonable measure demonstrations for on-road mobile, Cache County I/M Program, off-road mobile and point sources; and

    d. Approve the 2015 direct $PM_{2.5}$, NO_x and VOC MVEBs and the MVEB trading

mechanism.

VI. Consideration of Section 110(l) of the CAA

Under section 110(l) of the CAA, the EPA cannot approve a SIP revision if the revision would interfere with any applicable requirements concerning attainment and RFP toward attainment of the NAAQS, or any other applicable requirement of the Act. The EPA proposes to determine that the portions of the Logan UT-ID $PM_{2.5}$ SIP that we are acting on are consistent with the applicable requirements of the Act. Furthermore, these portions do not relax any previously approved SIP provision; thus they do not otherwise interfere with attainment and maintenance of the NAAQS. In addition, section 110(l) requires that each revision to an implement plan submitted by a state shall be adopted by the state after reasonable notice and opportunity for public hearing. On September 3, 2014, the Air Quality Board proposed for public comment the Logan, UT-ID Moderate $PM_{2.5}$ attainment plan. The public comment period was held from October 1 to October 31, 2014, with a public hearing being held on October 20, 2014. On December 3, 2014, the Air Quality Board adopted the Logan, UT-ID Moderate $PM_{2.5}$ attainment plan and became effective on December 4, 2014. Therefore, CAA section 110(l) requirements are satisfied.

VII. Incorporation by Reference

In this rule, the EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference the approval of portions of the Logan, UT-ID $PM_{2.5}$ Moderate SIP submitted by the state of Utah as discussed in section IV of this preamble. The EPA has made, and will continue to make, these materials generally available through

www.regulations.gov and/or at the EPA Region 8 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

VIII. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this proposed action approves state law as meeting federal requirements. For that reason, this proposed action:

- is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866;
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- does not provide the EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Ammonia, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide, Volatile organic compounds.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: November 21, 2017. _____

Debra H. Thomas,
Acting Regional Administrator,
Region 8.

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